

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2003-246780

(43)Date of publication of application : 02.09.2003

(51)Int.Cl.

C07D237/34
C07D401/04
// A61K 31/502
A61P 9/10
A61P 15/10
A61P 43/00

(21)Application number : 2002-355624

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(22)Date of filing : 06.12.2002

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(30)Priority

Priority number : 2001383733

Priority date : 17.12.2001

Priority country : JP

(54) METHOD FOR MANUFACTURING AROMATIC RING COMPOUND CONTAINING NITROGEN

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a useful method for manufacturing such an aromatic ring derivative containing nitrogen as a phthalazine derivative, a quinazoline derivative or the like which is useful as a cyclic GMP-phosphodiesterases inhibitor or the like.

SOLUTION: The method for manufacturing a compound (1e) indicated in formula (1e) (In the formula, R2 is a 1-6C alkyl group, or the like R1 is a halogen atom, a cyano group or the like. R3 is a 6-14C aryl 1-6C alkyl group which may have a substituent or the like. Y2 and Z2 are each independently a methine group substituted by a nitrogen atom or 4-hydroxypiperidine-1-yl group or the like), a salt thereof or their hydrates comprises using a compound (1b) indicated in formula (1b) (In the formula, R2 is a 1-6C alkyl group or the like. R1, R3 are the same as defined before. Y and Z are each independently a methine group substituted by a nitrogen atom or a halogen atom) as a raw material or an intermediate.

